

1. A method for isolating disseminated tumor cells from cell-containing body fluids, characterized in that the cell-containing body fluid or parts thereof are passed through a screen having a mesh or pore width of about 15 to 30  $\mu\text{m}$  and the retained cell fraction is obtained.
2. The method as claimed in claim 1, characterized in that the screen has a mesh or pore width of about 20  $\mu\text{m}$ .
3. The method as claimed in claim 1 or 2, characterized in that a cell-containing fraction is first isolated from the body fluid and subsequently screened.
4. The method as claimed in any of claims 1 to 3, characterized in that the disseminated tumor cells retained on the screen are removed from the screen, where appropriate in a mixture with non-cancer cells.
5. The method as claimed in any of claims 1 to 4, characterized in that a liquid is passed through the screen in the opposite direction.
6. The method as claimed in any of the preceding claims, characterized in that the body fluid used is blood, bone marrow, lymph, urine, sputum, effusions, amniotic fluid, aspirates, colon lavage, lung lavage, bronchial lavage, bladder irrigation fluid, or feces.
7. The method as claimed in claim 6, characterized in that the body fluid used is blood.

8. A method for extracorporeal elimination of disseminated tumor cells from cell-containing preparations, characterized in that the cell-containing preparation is passed through a screen  
5 having a mesh or pore width of about 15 to 30  $\mu\text{m}$ .
9. A method for characterizing disseminated tumor cells on the basis of DNA and/or RNA, wherein disseminated tumor cells are removed from body  
10 fluid of an individual using a method as claimed in claims 1 to 7 and are tested on the basis of DNA and/or mRNA for at least one cancer-specific gene and the same test is performed on non-cancer cells of the same individual for comparison.
- 15 10. The use of a screen having a mesh or pore width of about 15 to 30  $\mu\text{m}$  for isolating disseminated tumor cells from cell-containing body fluids.
- 20 11. A cell mixture comprising disseminated tumor cells, characterized by a polyclonal tumor cell content of at least 50%.
- 25 12. The cell mixture as claimed in claim 11, characterized in that the tumor cells are free of ligands customarily used for isolation purposes.
- 30 13. The cell mixture as claimed in claim 11 or 12, characterized by a polyclonal tumor cell content of at least 90%.
- 35 14. A cell mixture comprising disseminated tumor cells as claimed any of claims 11 to 13, which is obtainable by a method as claimed in any of claims 1 to 7.
15. A method for isolating cell components of disseminated tumor cells, wherein the cell components are obtained from at least one cell

mixture as claimed in claims 11 to 14 or a fraction thereof in a manner known per se.

- 5 16. A method for establishing cell lines of disseminated tumor cells, wherein at least one cell mixture as claimed in claims 11 to 14 or a fraction thereof is cultured.
- 10 17. The use of a cell mixture as claimed in any of claims 12 to 14 as therapeutic agent or target in diagnosis, therapy, animal experiments or science.
- 15 18. The use as claimed in claim 17 for identifying therapeutic targets.
19. The use as claimed in claim 17 for screening active substances.
- 20 20. The use as claimed in claim 17 for choosing an individual therapy.
- 25 21. A pharmaceutical or veterinary composition having at least one cell mixture as claimed in any of claims 11 to 14 and having further formulation excipients, active substances and/or components of a diagnostic test.